

**Response to Comments for the  
Triennial Review  
of the  
Water Quality Control Plan for the Central Valley Region,  
Sacramento and San Joaquin River Basins**

Written comments were received from:

1. Mr. William Shelton, Lower Cosumnes Resource Conservation District (1)
2. Ms. Kathleen Martyn Goforth, US Environmental Protection Agency (2-14)
3. Mr. Dennis Kalson, Environmental Health Program Manager, Solano County (15-16)
4. Mr. Ed Craddock, Butte County (17-19)
5. Mr. Kenneth C. Stuart, California Conference of Directors of Environmental Health (20-22)
6. Mr. Walt Pettit, California Urban Water Agencies (23-24)
7. Mr. Kevin M. Kauffman, Stockton East Water District and Mr. Morris Allen, City of Stockton (25-26)
8. Mr. David K. Tompkins, City of Vacaville (27-43)
9. Mr. Kenneth C. Stuart, Contra Costa Health Services (44-47)
10. Mr. Richard A. Denton, Contra Costa Water District (48)
11. Mr. John Herrick, South Delta Water Agency (49)
12. Mr. John C. Coburn, State Water Contractors (50-52)
13. Mr. John T. Headlee (53-54)
14. Mr. Brad Banner, County of Placer (55-56)
15. Mr. Dante John Nomellini, Central Delta Water Agency (57)
16. Mr. Michael P. Hill-Weld and Mr. Gordon Plantenga, County of Nevada (58-62)
17. Mr. Robert F. Shanks, Sacramento Regional County Sanitation District (63-92)
18. Ms. Cathy Crothers, Department of Water Resources (93-96)
19. Mr. Gary Reents, City of Sacramento (97-104)
20. Ms. Kati Buehler, California Rice Commission (105-106)
21. Mr. Mic Stewart, Metropolitan Water District of Southern California (107-111)
22. Mr. Dale A. Pierce, USDI Fish and Wildlife Service (112-117)
23. Mr. Brandon Nakagawa, San Joaquin County Public Works (informal comments) (118)
24. Ms. Jennifer Carville, Friends of the River (119-138)
25. Mr. Bruce West, West Yost & Associates (139-141)
26. Ms. Nicole E. Granquist, Downey, Brand, Seymour & Rohwer LLP (142-143)
27. Mr. Warren Tellefson, Central Valley Wastewater Manager's Association (144-156)

Verbal and written comments received during the 25 January 2002 workshop from:

28. Ms. Tess Dunham, California Farm Bureau Federation (157-159)
29. Ms. Jane Vorpagel, Department of Fish and Game (160-161)
30. Mr. Mike Zanolli, Department of Water Resources

31. Mr. John Coburn, State Water Contractors
32. Ms. Cindy Paulson, Brown and Caldwell/Turlock Irrigation District (162-164)
33. Mr. Ken Stewart, Contra Costa County
34. Mr. Parry Klassen, CURES-Coalition for Urban/Rural Environmental Stewardship (165)
35. Mr. Dan Hinrichs, DJH Engineering/Central Valley Wastewater Manager's Association
36. Mr. Bill Jennings, Deltakeeper (166-170)
37. Ms. Nicole E. Granquist, City of Turlock (171)
38. Ms. Jennifer Carville, Friends of the River
39. Mr. Terry Schmidtbauer, Environmental Health Department of Solano County
40. Mr. Patrick Koepele, Tuolumne River Preservation Trust (172)
41. Ms. Lynell Garfield, South Yuba River Citizen's League (173-176)
42. Mr. Bill Thomas, Grape & Tree Fruit/California Cattlemen's Association (177-181)
43. Ms. Jacqueline McCall, City of Vacaville
44. Ms. Elaine Archibald, California Urban Water Agencies
45. Mr. John T. Headlee (182)

Late written comments were received from the following:

46. Mr. Andy Eimanis, Makhteshim-Agar of North America, Inc. (183-184)
47. Ms. Alice Howard, Maidu Group of the Mother Lode Chapter (185)

Following are the responses to comments received regarding the Triennial Review and Modification of the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins.

William Shelton, Lower Cosumnes Resource Conservation District

1. *The Sacramento River from Freeport to Hood is listed on the 303(d) list and the City of Sacramento is still allowed to discharge its wastewater and stormwater to this reach. Should these discharges be allowed to continue without an evaluation of the effect on downstream users, specifically, groundwater recharge and impact on wells?*

All dischargers to water quality limited segments are regulated by NPDES permits with provisions to ensure that the discharges do not exacerbate the cause of the water quality impairment. The Sacramento River from Freeport to Hood is part of the Delta Waterways and is impaired due to elevated concentrations of chlorpyrifos, DDT, diazinon, mercury and unknown toxicity. Permits for the wastewater and the stormwater discharges from the City of Sacramento include interim provisions limiting the discharge of these constituents. After the total maximum daily load allocations (TMDLs) for this water body are completed, additional control provisions may be identified for adoption into the permits.

2. *Make it a high priority to amend the disapproved portions of the Basin Plan relating to the tributary rule, Delta dissolved oxygen, and antidegradation.*

Addressing these disapprovals is a high priority. See proposed basin plan amendment for more details.

3. *Designate recreational uses for Grassland Wetland water supply channels or provide the necessary information to justify omission of REC1 and REC2 beneficial uses from these water bodies.*

The beneficial uses of the Grassland Wetland water supply channels will be considered as part of Issue No. 15. Currently, there are insufficient resources to fully assess beneficial uses; thus, resulting in the low priority of this issue. If resources become available, the priority of this issue will be raised.

4. *Update the recreational water quality objectives for bacteria to be consistent with current EPA guidance by 2003.*

Updating the water quality objectives for bacteria is a high priority. See proposed basin plan amendment for more details.

5. *Update the water quality objectives for ammonia and chlorine to be consistent with current EPA guidance.*

This issue will be included in the work plan. Since the narrative toxicity objective indicates that the Regional Water Board can use available information to assist in determining compliance with the objective, current EPA guidance is already considered in specifying effluent and receiving water limits. This issue will be given a low priority. The priority may be raised if resources become available. See Issue Nos. 16 and 17 for more details on the status of this problem.

6. *Adopt a water quality objective for nutrients to be consistent with EPA recommended criteria.*

The State Water Board in coordination with USEPA Region IX has taken the lead in this issue by forming a nutrient workgroup to refine the national criteria. Regional Water Board staff is participating in this workgroup. A statewide strategy is expected.

7. *Adopt up-to-date objectives consistent with the on-going re-evaluation of the CTR constituents.*

Current and any future CTR constituents apply as water quality objectives throughout the State. No separate effort of the Regional Water Board is required.

8. *The Regional Water Board should place a high priority on conducting any basin planning related to completion of TMDLs.*

The budgets for some TMDLs include basin planning resources. Those will be given a high priority in the work plan.

9. *Update water quality objectives for dissolved oxygen to be consistent with current EPA guidance.*

This issue will be included in the work plan. However, since the Basin Plan already contains dissolved oxygen objectives and there is a lack of resources, this issue will be given a low priority. The priority may be raised if resources become available. See Issue No. 18 for more details on the status of this problem.

10. *Re-evaluate the language in the current dissolved oxygen objective that allows an exception for Delta waters that were constructed for a special purpose and from which fish have been excluded or where the fishery is not important as a beneficial use. Although fish may not be present, other aquatic life may be present and require protection.*

This will be addressed when the dissolved oxygen objective language is amended to resolve the EPA disapproval. However, further study is needed to evaluate the appropriate water quality objectives for the Delta so an amendment is not proposed at this time.

11. *Designate RARE, GWR and FRSH beneficial uses where they are currently known to exist.*

Although these uses exist within the basins, the Basin Plan does not identify any unique water quality objectives to protect these uses and staff is unaware of any special needs. This issue will be included in the work plan as a low priority. See Issue No. 15 for more details on the status of this problem.

12. *Evaluate the need for objectives beyond the narrative toxicity objective currently in the Basin Plan and the "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California" to fully protect beneficial uses.*

Staff reviews new criteria from a variety of sources but lack of resources prevents a detailed search and evaluation of numeric criteria. At this time, staff is not aware of any circumstances requiring development of additional water quality objectives to provide protection beyond the State and Regional plans and policies.

13. *The Basin Plan should be revised to explain what constitutes “appropriate averaging period” in determining compliance with water quality objectives for pH, temperature, and turbidity.*

These objectives are currently being re-evaluated as part of the Effluent Dominated Water Bodies issue. This issue may resolve itself as part of the re-evaluation. This request will be reviewed at the next triennial review.

14. *Evaluate the effects of the 1996 Amendment to the Basin Plan regarding the Grasslands area. Specifically, investigate the effects of the policy of “optimizing protection of beneficial uses on a watershed basis,” the potential impact of the current discharges of subsurface agricultural drainage to the San Joaquin River and its tributaries, the altered discharge pathway, and the 8,000 pounds per year limit on selenium discharges. In addition, update the policy to reflect any revised aquatic life criteria proposed by EPA for selenium.*

These are implementation activities that are carried out by the regulatory staff outside the Basin Planning process.

Any USEPA revised criteria for selenium will be considered when it is released.

Dennis Kalson, Environmental Health Program Manager, Solano County

15. *Assign a high priority to reviewing and revising the Basin Plan Guidelines for Waste Disposal from Land Development.*

In accordance with AB 885, now Section 13291 of the California Water Code, the State Water Board has formed advisory groups to develop new guidelines and regulations for on-site disposal systems by 1 January 2004. Per Section 13291(e) of the California Water Code, “each regional board shall incorporate the regulations or standards... into the appropriate regional water quality control plan.” See Issue No. 8 for more details on the status of this problem.

16. *Update the Memorandums of Understanding between local agencies and the Regional Water Board for implementation of regulations and standards relating to on-site disposal systems.*

The State Water Board has formed advisory groups to develop new guidelines and regulations for on-site disposal systems by 1 January 2004. An implementation program will be a part of the State Water Board’s regulations and, at a minimum, will include guidelines for the transfer of the necessary authority to local agencies. See Issue No. 8 for more details on the status of this problem.

Ed Craddock, Butte County

17. *Due to the lack of Regional Water Board staff resources, do not place a high priority on TMDLs for the Feather River.*

The Feather River was listed on the Clean Water Act Section 303(d) list as impaired due to toxic levels of organophosphate pesticides. Significant progress has been made to develop water quality objectives and staff is currently working on a program of implementation to address these pesticides in several waterbodies including the Feather River. As a continuing high priority issue, the basin planning work will be funded through TMDL funds.

18. *The temperature objective to protect spring run salmon and steelhead should be deferred because the success of ongoing recovery projects in the area should be considered.*

Although the ongoing recovery projects may be successful, these projects only affect the upper Sacramento River and the issue encompasses both the Sacramento River and the San Joaquin River basins. This issue will be included in the work plan as a medium priority. See Issue No. 10 for more details on the status of this problem.

19. *Groundwater monitoring should receive a high priority.*

The Regional Water Board agrees that groundwater in the Central Valley is a valuable resource and its beneficial uses must be protected. However, groundwater monitoring generally requires extensive staff and financial resources. Due to the current lack of resources, this issue is included in the work plan as a medium priority. The priority may be raised if resources become available. See Issue No. 12 for more details on the status of this problem.

Kenneth C. Stuart, California Conference of Directors of Environmental Health

20. *Assign a high priority to reviewing and revising the Basin Plan Guidelines for Waste Disposal from Land Development.*

See Response to Comment No. 15.

21. *Update the Memorandums of Understanding between local agencies and the Regional Water Board for implementation of regulations and standards relating to on-site disposal systems.*

See Response to Comment No. 16.

22. *The Basin Plan should address staffing levels needed by the Regional Water Board to provide proper and timely assistance to counties implementing on-site disposal system programs.*

Although the lack of adequate staffing levels affects the ability to update the Basin Plan, the basin planning process is not the proper place to address staff resources. The State Water Board is committed to provide on-site disposal system guidelines and regulations by 1 January 2004. The guidelines should include an estimate of necessary funding levels to maintain an effective program.

Walt Pettit, California Urban Water Agencies

23. *The issue to develop a drinking water policy should receive a high priority. CUWA offers financial assistance to the Board. Note that CalFed Record of Decision requires that the drinking water policy be developed by the end of 2004.*

This issue has been included in the workplan as a high priority. See Issue No. 7 for more details on the status of this problem.

24. *Supports adding E. Coli as a bacteria objective for recreational waters.*

Comment noted and appreciated.

Mr. Kevin M. Kauffman, Stockton East Water District and Mr. Morris Allen, City of Stockton

25. *The highest priority should be placed on developing water quality objectives and an implementation program for salinity and boron.*

Staff apologizes for inadvertently deleting this issue from the Notice. The basin plan amendment for salts and boron remains a high priority. See Issue No. 2 for more details on the status of this problem.

26. *Developing a TMDL for salinity in the San Joaquin River should receive a high priority.*

The basin plan amendment referred to in Comment No. 25 will incorporate appropriate load reduction limits to satisfy the federal Clean Water Act requirements for adopting TMDLs.

David K. Tompkins, City of Vacaville

27. *The Regional Water Board is interpreting the tributary statement in the Basin Plan incorrectly. It should be a high priority to clarify the tributary statement to specify that it does not designate uses for all tributaries and, therefore, de-designating the use is not necessary prior to applying the actual existing beneficial uses to the tributary streams.*

The Regional Water Board applies the tributary rule consistent with the Clean Water Act and applicable State and Regional Water Board policies. The Regional

Water Board does not simply infer the beneficial uses of the tributary based on the specifically identified downstream water body. Rather, it makes findings concerning whether such uses are existing or potential uses in the tributary or, whether they otherwise must be protected. Permit requirements may be necessary to protect the currently existing or probable future beneficial uses, to comply with CWA requirements including those regarding “existing” uses and use attainability analyses, or to protect the uses of the downstream water bodies. The Regional Water Board must comply with the federal regulations at 40 CFR Section 131.10 to change beneficial uses. USEPA disapproved the tributary language in the Basin Plan. The Regional Water Board will consider revisions to the Basin Plan to clarify the tributary language.

28. *The Regional Water Board should make it a high priority to develop an effluent dominated water body (EDW) policy that will include appropriate beneficial use designations and water quality objectives that will protect these uses. The Regional Water Board should recognize that potential uses do not require the same protection as existing uses. The Regional Water Board should adopt a mechanism to provide for interim permit limits for dischargers that will be affected by the EDW policy.*

Working with stakeholders affected by effluent dominated water bodies is a high priority. The State Water Board has taken the lead in development of a policy. In the meantime, the Regional Water Board staff is working on site-specific water quality objectives for pH, turbidity and temperature for Deer Creek. Staff is also working on a general basin plan amendment for pH and turbidity. Staff will work on other regional issues as they are identified and staff resources are available. Any policies regarding beneficial uses and water quality objectives need to be individually justified and adopted in a basin planning process before becoming effective. See Issue No. 1 for more details on the status of this problem.

29. *The Regional Water Board should make it a high priority to modify the Basin Plan to include guidance on implementing the narrative objectives to prevent inappropriate use of numeric objectives. If the Regional Water Board substitutes numeric criteria for narrative objectives, the Regional Water Board must first consider economics and other factors required by Water Code Section 13241, develop a program of implementation as required by Water Code Section 13242, and comply with CEQA.*

The Basin Plan contains a narrative toxicity objective that states that all waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with the objective is determined by analyses of indicator organisms, species diversity, population density, growth anomalies, and biotoxicity tests of appropriate duration or other methods as specified by the Regional Water Board. In setting effluent limits, staff often uses USEPA criteria as the receiving water goal (in the absence of Basin Plan numerical objectives). The Basin Plan contains



other narrative objectives, for example for tastes and odors and chemical constituents.

Where compliance with narrative objectives is required to protect beneficial uses, the Regional Water Board adopts, on a case-by-case basis in waste discharge requirements and other orders, numerical limitations that will implement or translate the narrative objectives. The Basin Plan expressly allows the Regional Water Board to consider numerical criteria and guidelines developed by other agencies and organizations. See the Regional Water Board Policy for Application of Water Quality Objectives in Chapter IV of the Basin Plan. This method of implementing narrative objectives is also authorized by applicable federal regulations (See 40CFR-122.44(d)(1)(vi)(B)). When the Regional Water Board uses a numerical limitation to translate a narrative water quality objective, the Regional Water Board is implementing an existing water quality objective and is therefore not required to consider factors identified in Water Code Section 13241 (See State Water Resources Control Board Order WQ 77-16, Pp. 20-27 - Pacific Water Conditioning Association, Inc.).

30. *The Regional Water Board should make it a high priority to clarify the application of tertiary treatment requirement for domestic wastewater treatment plants as it is related to bacteria. The Regional Water Board has relied on the Department of Health Services guidelines and recommendations for bacteria limits and these are typically more stringent than the basin plan water quality objective for recreational waters. More stringent limits should be included in a basin plan policy after consideration of the costs and benefits and balancing of the factors in Water Code Section 13241 and complying with CEQA requirements.*

The Regional Water Board is required to protect the beneficial uses in issuing waste discharge requirements. In the case of municipal and domestic supply, contact recreation and reclamation uses, the Regional Water Board consults with the State Department of Health Services to assure protection of public health. Where the Regional Water Board imposes effluent limits that are not based on existing water quality objectives, it considers the factors in Water Code Section 13241.

31. *The Regional Water Board should adopt clear policies to guide permit renewals to ensure consistency basinwide.*

The Regional Water Board strives to adopt clear policies to direct Board activities. However, due to site-specific conditions, application of these policies for specific discharges will still result in permit conditions that can vary significantly. Overly rigid policies lack flexibility to protect water quality at the least cost.

32. *The Regional Water Board should delete the incorporation-by-reference provision related to drinking water maximum contaminant levels (MCLs) in the water quality objectives for chemicals.*

Compliance with MCLs adopted by the Department of Health Services (DHS) is required for water in regulated drinking water distribution systems. Drinking water is a component of the municipal and domestic supply beneficial use. Lack of compliance in source waters can impair the use of water or necessitate costly treatment. DHS adopts new MCLs in an open public process that is essentially the same as the process that the Regional Water Board would go through to adopt water quality objectives. There would be no purpose for the Regional Water Board to consider the same information that has already been considered by DHS in adopting MCLs. The MCLs become water quality objectives that must be met to protect the drinking water beneficial use.

33. *The Regional Water Board should adopt appropriate averaging periods for the constituents in Table III-1 of the Basin Plan.*

The constituents in Table III-1 are instantaneous maxima. However, the California Toxics Rule (CTR) promulgated by the USEPA in 2000 takes precedence over most of the constituents in Table III-1. The CTR allows for the use of averaging periods for the constituents it covers where appropriate.

34. *The following water quality objective for pesticides should be deleted from the basin plan: "Total identifiable persistent chlorinated hydrocarbon pesticides shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the Executive Officer." Wastewater treatment plants are discharging detectable quantities of currently banned pesticides. Since the pesticides are banned, there is no opportunity for source control and the only possible treatment would be activated carbon. Therefore, this objective is unnecessarily stringent to protect beneficial uses and is not technically and economically achievable.*

Compliance with this objective has been a problem for only a minor number of facilities. Staff believes that the reason these facilities have difficulty meeting the objectives is inadequate source control within their systems, which can be corrected. Most of the chlorinated hydrocarbon pesticides are no longer used, but continue to exist in the soil and enter aquatic food chains where they accumulate to levels of concern. There is significant concern that this group of pesticides may also be endocrine disrupters. Ambient environmental levels are already a concern. With adequate source control measures in place, sources from past activities should not be causing permit violations. Other sources can and should be controlled to the maximum extent possible.

35. *The Regional Water Board should clarify in the Basin Plan how the USEPA ambient water quality criteria should be used in permit limits. If the criteria are*

*to be used, they should be adopted after consideration of economics and other factors required by the Water Code.*

See Response to Comment No. 29.

36. *The Regional Water Board should clarify what groundwater objectives are applied in NPDES permits. Currently, the Regional Water Board is not allowing any increase in the concentration of any constituent in groundwater beyond background levels. However, this objective may require costly controls that provide little or no benefit to the people of the state.*

State Water Board Resolution No. 68-16 requires the maintenance of the existing high quality of water (i.e., background) unless a change in water quality “will be consistent with maximum benefit to the people of the State...” The Regional Water Board Policy for Application of Water Quality Objectives and Antidegradation Implementation Policy, included in Chapter IV of the Basin Plan, explains how the Regional Water Board applies water quality objectives to ensure the reasonable protection of beneficial uses of water and how the Regional Water Board applies Resolution No. 68-16 to promote the maintenance of existing high quality waters. In order to determine if an increase in constituent concentrations beyond background is reasonable, the conditions in Resolution No. 68-16 must be satisfied, based on information submitted by the discharger. The Regional Water Board has adopted many NPDES permits that allow some degradation of groundwater.

37. *The Basin Plan allows adoption of compliance schedules for new water quality objectives or criteria adopted after 1995 but not for objectives adopted prior to 1995. The Regional Water Board has started interpreting objectives adopted prior to 1995 different than in the past but does not acknowledge this as new objectives; thus, not allowing compliance schedules for these new interpretations. This is inconsistent with other Regional Water Boards such as the San Francisco Regional Water Board. The Regional Water Board should include a policy in the Basin Plan allowing for compliance schedules for new interpretations of objectives. In addition, the Basin Plan allows up to ten years for compliance schedules. The Public Advisory Task Forces to the SWRCB recommended that up to 15 years be allowed for compliance with new water quality objectives.*

The Regional Water Board implementation of narrative water quality objectives by applying relevant numerical limits published by other agencies and organizations is not a new objective although the resulting receiving water or effluent limits may be new to certain dischargers. Even though these limits were not previously articulated numerically in the permits, dischargers were still expected to comply with the narrative objective. Since these do not constitute new objectives, no compliance schedule is needed.

The current compliance schedule language was added to the Basin Plan in 1995 at the request of the discharger community. At that time, the Regional Water Board considered information and comments from all interested parties. The time period contained in the Basin Plan appears sufficient and no information has been submitted that would suggest that conditions have changed significantly since 1995.

38. *The Regional Water Board should develop an implementation policy for use of the narrative objective in permits. If the Regional Water Board chooses to use USEPA Ambient Water Quality Criteria to implement the narrative water quality objectives, then the USEPA Ambient Water Quality Criteria should be formally adopted into the Basin Plan with consideration of economics and other factors as required by the Water Code.*

See Response to Comment No. 29.

39. *The Regional Water Board should consider economics and other factors as required by the Water Code prior to implementing the National Toxics Rule and the California Toxics Rule adopted by the USEPA.*

In the National Toxics Rule and the California Toxics Rule, the USEPA adopted federal regulations promulgating water quality criteria for specific waters in various states, including California. Together with beneficial use designations, these promulgated criteria become enforceable water quality standards for those waters. The State Water Board “Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California,” adopted in May 2000, establishes the implementation policy for the USEPA promulgated criteria and included an evaluation of economic factors. It supercedes any regional policies on this topic. The Regional Water Board has no authority to modify federal regulations, such as the National Toxics Rule or the California Toxics Rule. California Water Code factors that need to be evaluated when a Regional Water Board or the State Water Board adopts water quality objectives do not apply to the promulgation of criteria by USEPA pursuant to the federal Clean Water Act. Federal law precludes the consideration of costs when developing effluent limitations for NPDES permits. See *Ackels v. EPA* (9th Cir. 1993) 7 F.3d 862, 865-66 (“the [NPDES effluent] limitation is necessary to comply with state water quality standards, and the Clean Water Act requires the permits to meet the state water quality standards. See 33 U.S.C. Sections 1311(b)(1)(C), 1313(c)(2).”)

40. *The Regional Water Board should include a policy on the use of water quality based effluent limits in waste discharge requirements. They should be based on consideration of dilution and ambient background conditions.*

The Basin Plan already contains discussions on selection of water quality criteria, handling multiple toxicants, and mixing zones. Detailed technical guidance is

provided in the State Water Board “Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California” and the USEPA “Technical Support Document,” and need not be repeated in the Basin Plan. It is unclear what specific amendments are requested.

41. *The Regional Water Board should clarify that mixing zones are allowed for acute toxicity. The Regional Water Board has denied mixing zones for acute aquatic life objectives or acute toxicity based on the 96-hour bioassay tests.*

The existing policy on mixing zones is contained in Chapter IV, under the Policy for Application of Water Quality Objectives. The policy says that “in conjunction with the issuance of NPDES and storm water permits, the Regional Water Board may designate mixing zones within which water quality objectives will not apply provided the discharger has demonstrated to the satisfaction of the Regional Water Board that the mixing zone will not adversely impact beneficial uses.”

Under this language, the Regional Water Board may allow a small mixing zone for acute toxicity if the Regional Water Board finds that the mixing zone will not adversely impact beneficial uses.

42. *Include a policy that wastewater system bypasses and overflows should be minimized but recognize that it is not in the public interest to prohibit them altogether.*

This is a permitting issue and is best handled through the permitting process.

43. *Modify the compliance schedule language to allow a maximum of 15 years rather than 10 years to achieve compliance.*

See Response to Comment No. 37.

Kenneth C. Stuart, Contra Costa Health Services

44. *Assign a high priority to reviewing and revising the Basin Plan Guidelines for Waste Disposal from Land Development.*

See Response to Comment No. 15.

45. *Update the Memorandums of Understanding between local agencies and the Regional Water Board for implementation of regulations and standards relating to on-site disposal systems.*

See Response to Comment No. 16.

46. *Regarding the incorporation of E. Coli objectives into the Basin Plan, they should be consistent with the standards that the Department of Health Services will set as required by AB 1438.*

The Department of Health Services released draft Guidance for Freshwater Beaches on 24 July 2001. The draft guidance is consistent with the USEPA criteria, which are the basis for staff's recommendation. More details on the staff recommendation are contained in the proposed basin plan amendment.

47. *Regarding the drinking water policy issue, this should be addressed cautiously to preserve the beneficial uses of the Delta.*

Comment noted.

Richard A. Denton, Contra Costa Water District

48. *The Basin Plan should include adequate standards to protect source water quality for drinking water beneficial uses.*

See Response to Comment No. 23.

John Herrick, South Delta Water Agency

49. *The Basin Plan should include water quality standards for salinity upstream of Vernalis.*

See Response to Comment No. 25.

John C. Coburn, State Water Contractors

50. *The Basin Plan should include water quality objectives for total organic carbon and pathogens. Development of these water quality objectives should be a high priority.*

See Response to Comment No. 23.

51. *The Basin Plan should include a policy that salt loads should be reduced.*

The Regional Water Board agrees that degradation of water quality by salts is a serious problem in the Central Valley and a salt balance should be pursued. Therefore, in the introductory paragraphs of the "Water Quality Concerns" section in Chapter IV, the Regional Water Board has already recognized the importance of salt management then goes on to identify the irrigated agricultural practice of installing tile drains as contributing to salts leaching to surface and ground waters. In addition, the Regional Water Board is working on developing

salt and boron standards for the San Joaquin River. See Issue No. 2 for more details on the status of this problem.

52. *The Basin Plan should specify that the monitoring program for regulated dischargers include drinking water parameters.*

See Response to Comment No. 23.

John T. Headlee

53. *The Regional Water Board should evaluate the Basin Plan to address the economic impacts of the water quality objectives on dredging.*

Some of the Basin Plan objectives that might impact dredging were developed before 1969 under the authority of the Federal Water Pollution Control Act and the California Water Code (then known as the Dickey Water Pollution Act). At that time, no economic analysis was required as part of the development and adoption of water quality objectives. Since then, the objectives have been approved by the State Water Board and the USEPA, therefore, conducting an economic analysis at this time is unwarranted.

Objectives developed after 1969 must comply with the economic consideration factor required under Section 13241 of the California Water Code. This requirement is met by considering all available information at the time the water quality objective is adopted and not on speculation of potential economic impacts.

Criteria promulgated by USEPA in the California Toxics Rule and National Toxics Rule, when combined with beneficial use designations in the Basin Plan, constitute enforceable water quality standards for surface waters. USEPA is not bound to consider economics when promulgating criteria pursuant to the Federal Clean Water Act. See Response to Comment No. 39.

54. *The Regional Water Board should re-evaluate the “Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California” to include economic analysis of discharge types such as dredging that were not included in the original analysis.*

The statewide “Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California” was developed by the State Water Board. Any questions on the derivation of the policy should be referred to the State Water Board. This policy was available for public comment prior to adoption in 2000 by the State Water Board and approval by the Office of Administrative Law and the USEPA. The time for comments was during the public review period of the policy.

Brad Banner, County of Placer

55. *The “Guidelines for Waste Disposal from Land Development” should be reviewed and updated. Specific areas of concern include alternative systems allowing a reduction in the vertical separation requirements, treatment and performance standards, operation and maintenance objectives consistent with the USEPA “Guidelines for Management of Onsite/Decentralized Wastewater Systems,” state-wide standards for local programs, and a consistent implementation framework.*

See Response to Comment No. 15.

56. *Update the Memorandums of Understanding between local agencies and the Regional Water Board for implementation of regulations and standards relating to on-site disposal systems.*

See Response to Comment No. 16.

Dante John Nomellini, Central Delta Water Agency

57. *The Regional Water Board should adopt reasonable salinity and boron objectives upstream of Vernalis as directed by the State Water Board.*

See Response to Comment No. 25.

Michael P. Hill-Weld and Gordon Plantenga, County of Nevada

58. *The Regional Water Board should consider economics when determining the discharge requirements for small treatment facilities, especially when they discharge into effluent dominated water bodies.*

The only time that the Regional Water Board is required to consider economics is in establishing water quality objectives [CWC Section 13241(d)]. As specified in Section 13263(a) of the California Water Code, “the Regional Water Board, after any necessary hearing, shall prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge, except discharges into a community sewer system, with relation to the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed. The requirements shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241.” The reference to Section 13241 in Section 13263 was only intended to require the consideration of those factors in adopting waste discharge requirements before the Regional Water Boards had adopted Basin Plans. Once a Basin Plan has been adopted, the Regional Water Boards no longer have to consider the factors in Section 13241 before adopting



effluent and receiving water limits in waste discharge requirements. Federal law precludes the consideration of costs when developing effluent limitations for NPDES permits. See *Ackels v. EPA* (9th Cir. 1993) 7 F.3d 862, 865-66 (“the [NPDES effluent] limitation is necessary to comply with state water quality standards, and the Clean Water Act requires the permits to meet the state water quality standards. See 33 U.S.C. Sections 1311(b)(1)(C), 1313(c)(2),”) and *In re: New England Plating Co.* (“[I]n the first instance, there is little question that cost considerations play no role in the setting of effluent limits . . . . The CWA and its implementing regulations clearly require the Region to set effluent limits for an individual pollutant that had the reasonable potential to cause a water quality violation. In requiring compliance with applicable water quality standards, the CWA simply does not make any exceptions for cost or technological feasibility.” NPDES Appeal No. 00-7, slip op. at 18 (EAB, March 29, 2001).)

Economics are considered in the establishment of time schedules for compliance with new and revised water quality objectives.

Also, see Response to Comment No. 28 regarding the Effluent Dominated Water bodies issue.

59. *Regarding the revised bacteria objective proposed by staff, how does this compare with the existing total and fecal coliform requirements in the permits? What is the scientific basis for the proposal?*

The updated bacteria objective is related to recreational waters. Most permit limits are determined by the Water Recycling Criteria contained in Title 22, Division 4, Chapter 3, California Code of Regulations. The limits contained in the Water Recycling Criteria are more stringent than the proposed recreational bacteria objective so there is no expected impact to wastewater treatment plants other than possibly monitoring costs. The scientific basis for the proposed bacteria objective is the USEPA, “Ambient Water Quality Criteria for Bacteria – 1986.”

60. *Regarding the revision to the tributary language proposed by staff, what are these revisions and what is the basis for them?*

See proposed basin plan amendment for details on the staff’s recommendation and the basis.

61. *Regarding the policy for on-site disposal systems, how does this relate to AB 885?*

See Response to Comment No. 15.

62. *Has the Board considered a phosphate objective?*

It is staff's understanding that phosphate will be included as part of the nutrient criteria being developed by USEPA. See Response to Comment No. 6.

Robert F. Shanks, Sacramento Regional County Sanitation District

63. *Supports the development of Total Maximum Daily Load Allocations as a high priority that must be addressed.*

Comment noted.

64. *The following water quality objective for pesticides should be deleted from the basin plan: "Total identifiable persistent chlorinated hydrocarbon pesticides shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the Executive Officer." Wastewater treatment plants are discharging detectable quantities of currently banned pesticides. Since the pesticides are banned, there is no opportunity for source control and the only possible treatment would be activated carbon. Therefore, this objective is unnecessarily stringent to protect beneficial uses and is not technically and economically achievable.*

See Response to Comment No. 34.

65. *The Regional Water Board should clarify in the Basin Plan how the USEPA ambient water quality criteria should be used in permit limits. If the criteria are to be used, they should be adopted after consideration of economics and other factors required by the Water Code.*

See Response to Comment No. 29.

66. *The issue to develop a policy for maintaining the water quality of drinking water should be a high priority and must be addressed. The Sacramento Regional County Sanitation District has committed funding to address this issue.*

The Regional Water Board concurs that this issue is a high priority. See Issue No. 7 for more details on the status of this problem.

67. *The Regional Water Board should make it a high priority to clarify its implementation of the State Water Board Resolution No. 68-16.*

Chapter IV of the Basin Plan explains how the Regional Water Board applies water quality objectives to ensure the reasonable protection of beneficial uses of water and how the Regional Water Board applies Resolution No. 68-16 to promote the maintenance of existing high quality waters. This explanation is included in the Regional Water Board Antidegradation Implementation Policy and Policy for Application of Water Quality Objectives which were added to the Basin Plan in 1994.

On a case-by-case basis the Regional Water Board makes determinations on which changes to water quality are consistent with maximum benefit to the people of the state. These determinations are made in public hearings, with all parties given the opportunity to present information.

68. *The issue of a groundwater survey and development of control policies for discharges to groundwater should receive a high priority and must be addressed.*

See Response to Comment No. 19.

69. *The issue to update the bacteria objectives for consistency with USEPA criteria should be a low priority unless it will resolve the inconsistency between the basin plan objective and current permitting requirements.*

The USEPA recommended bacteria indicator of E. Coli is expected to provide a better measure of potential impact of a water body to human health than fecal coliform. The basin plan objective for bacteria applies to the contact recreation beneficial use. Other beneficial use criteria are not affected by this proposal. The resource needs for this issue will be minor since the administration of the amendment will be a part of this triennial review and no additional development of scientific justification is necessary since the USEPA “Ambient Water Quality Criteria for Bacteria – 1986” provides the necessary scientific basis for the amendment.

70. *The issue to update the temperature objectives to protect spring run salmon and steelhead should receive a low priority unless the Regional Water Board is proposing a basin-wide update.*

See Response to Comment No. 18.

71. *The development of ammonia objectives should receive a high priority.*

See Response to Comment No. 5.

72. *The development of chlorine objectives should receive a high priority.*

See Response to Comment No. 5.

73. *The Regional Water Board should delete the incorporation-by-reference provision related to drinking water maximum contaminant levels in the water quality objectives for chemicals.*

See Response to Comment No. 32.

74. *The Regional Water Board should adopt appropriate averaging periods for the constituents in Table III-1 of the Basin Plan.*

See Response to Comment No. 33.

75. *The Regional Water Board should clarify what groundwater objectives are applied in NPDES permits. Currently, the Regional Water Board is not allowing any increase in the concentration of any constituent in groundwater beyond background levels. However, this objective is may require costly controls that provide little or no benefit to the people of the state.*

See Response to Comment No. 36.

76. *The Basin Plan allows adoption of compliance schedules for new water quality objectives or criteria adopted after 1995 but not for objectives adopted prior to 1995. The Regional Water Board has started interpreting objectives adopted prior to 1995 different than in the past but does not acknowledge this as new objectives; thus, not allowing compliance schedules for these new interpretations. This is inconsistent with other Regional Water Boards such as the San Francisco Regional Water Board. The Regional Water Board should include a policy in the Basin Plan allowing for compliance schedules for new interpretations of objectives. In addition, the Basin Plan allows up to ten years for compliance schedules. The Public Advisory Task Forces to the SWRCB recommended that up to 15 years be allowed for compliance with new water quality objectives.*

See Response to Comment No. 37.

77. *The Regional Water Board should develop an implementation policy for use of the narrative objective in permits. If the Regional Water Board chooses to use USEPA Ambient Water Quality Criteria to implement the narrative water quality objectives, then the USEPA Ambient Water Quality Criteria should be formally adopted into the Basin Plan with consideration of economics and other factors as required by the Water Code.*

See Response to Comment No. 29.

78. *The Regional Water Board should consider economics and other factors as required by the Water Code prior to implementing the National Toxics Rule and the California Toxics Rule adopted by the USEPA.*

See Response to Comment No. 39.

79. *The Regional Water Board should include a policy on the use of water quality based effluent limits in waste discharge requirements.*

See Response to Comment No. 40.

80. *The Regional Water Board should clarify that mixing zones are allowed for acute toxicity. The Regional Water Board has denied mixing zones for acute aquatic life objectives or acute toxicity based on the 96-hour bioassay tests.*

See Response to Comment No. 41.

81. *Include a policy that wastewater system bypasses and overflows should be minimized but recognize that it is not in the public interest to prohibit them altogether.*

See Response to Comment No. 42.

82. *Modify the compliance schedule language to allow a maximum of 15 years rather than 10 years to achieve compliance.*

See Response to Comment No. 37.

83. *The Regional Water Board should revise the policy for on-site disposal systems. Any basin plan amendments should be coordinated with regulations that the State Water Board is required to develop as a result of AB 885.*

See Response to Comment No. 15.

84. *The issue of developing a waiver policy should receive a low priority and the existing waivers should be renewed.*

Section 13269(f) of the California Water Code requires the Regional Water Board to review the terms and conditions of any waiver for a specific type of discharge, including existing waivers (e.g., discharges waived under Regional Water Board Resolution No. 82-036). Further, it requires the review to be conducted at a public hearing. In effect, renewal of the existing waivers requires review and update of the Regional Water Board's waiver policy. After review, any discharge types that are found to have a minimal impact to water quality may qualify for a five-year waiver. However, prior to adopting a waiver, the Board must first comply with the California Environmental Quality Act. See Issue No. 6 for more details on the status of this issue.

85. *The issue of resolving the EPA disapproval of the dissolved oxygen objective in the Delta should receive a low priority. However, if it is a simple matter to do, then there is no objection to doing this during this triennial review.*

Further study is needed to evaluate the appropriate water quality objectives for dissolved oxygen in the Delta so an amendment is not proposed at this time.

86. *The development of water quality objectives for rice herbicides should receive a low priority.*

See Issue No. 9 for more details on the status of this problem.

87. *The issue of developing a policy for effluent dominated water bodies should be referred to the State Water Board since this is a statewide issue.*

See Response to Comment No. 28.

88. *The issue of resolving the USEPA disapproval of the tributary rule should be referred to the State Water Board since this is a statewide issue.*

Although tributary rules may be a statewide issue, the USEPA disapproval was specific for the Sacramento and San Joaquin River Basins. Staff will propose a simple amendment. The resource needs for this issue will be minor since the administration of the amendment will be a part of this triennial review. See proposed basin plan amendment for more details on this issue.

89. *The issue of developing a policy for agricultural dominated water bodies and agricultural conveyance facilities should be part of the effluent dominated water bodies issue and should be referred to the State Water Board since this is a statewide issue.*

Elements of this issue fall within the Effluent Dominated Water Bodies Issue and the Waiver Issue. The State Water Board has taken the lead in these two issues. See Issue No. 11 for more details on the status of this problem.

90. *The Regional Water Board should make it the highest priority to obtain sufficient resources for basin planning and TMDLs. If necessary, resources should be borrowed from the NPDES permitting program.*

Comment noted. Unfortunately, the number of basin planning and TMDL issues would require more resources than is available in the entire Region. Therefore, the Regional Water Board budgets its resources as appropriate and allowable by funding constraints.

91. *The Regional Water Board should commit to a time schedule to complete the items in the triennial review work plan.*

High priority issues will include a time schedule. However, basin planning is not a quick process. It requires time-consuming studies and a lengthy approval process.

92. *The Regional Water Board should commit to a stakeholder process to address the high priority items in the triennial review.*

The Regional and State Water Boards are working with stakeholder groups to address issues related to effluent dominated water bodies, waivers, onsite sewage disposal systems, drinking water and the in-progress TMDLs. Stakeholder input frameworks are tailored to take advantage of the strengths of stakeholder groups and their interests. The Regional Water Board welcomes stakeholder participation in all aspects of basin plan review.

Cathy Crothers, Department of Water Resources

93. *The Regional Water Board should make it a high priority to develop a drinking water policy. This should include increasing coordination between the Regional Water Board, Department of Health Services and the State Water Board, collect data, identify sources and loads of pollutants of concern, identify appropriate water quality objectives, obtain sufficient resources, form a workgroup of stakeholders, include monitoring of drinking water constituents in current permits, generally support tertiary treatment and reclamation to reduce loading of total organic carbons and pathogens, and update bacteria objectives.*

See Response to Comment No. 23.

94. *The Regional Water Board should develop a process to provide regular public updates of ongoing TMDLs.*

A formal basin plan process is not needed. Staff workshops will be held periodically to update the public on the progress of individual TMDLs and to obtain input. Staff will provide periodic updates at Regional Water Board meetings through the Executive Officer's report and TMDL presentation materials on the Regional Water Board web site at:

<http://www.swrcb.ca.gov/rwqcb5/programs/tmdl>.

95. *Supports the issue to clarify the dissolved oxygen objective language.*

Comment noted and appreciated. Unfortunately, further study is needed to evaluate the appropriate water quality objectives for dissolved oxygen in the Delta so an amendment is not proposed at this time.

96. *Regarding the issue to develop temperature objectives to protect spring-run salmon and steelhead, there is a great deal of ongoing federal and state work in this area. The Regional Water Board is urged to work cooperatively with these other agencies in this issue.*

See Response to Comment No. 18. The Regional Water Board will consult with all relevant and interested agencies and entities when developing objectives.

Gary Reents, City of Sacramento

97. *The Basin Plan should have an urban runoff policy consistent with USEPA guidance. The City of Sacramento and other Sacramento Stormwater Program Permittees would be interested in assisting the Regional Water Board develop this policy.*

The Regional Water Board's policy is to implement the stormwater regulations contained in 40 CFR Parts 122, 123 and 124. Staff is not aware of a need to include guidance as a basin plan policy at this time. The TMDL program may result in revising stormwater permits to include load and/or concentration limits for some constituents.

98. *The Basin Plan should include water quality objectives for wet weather to address the seasonality of certain beneficial uses.*

The Basin Plan includes seasonal water quality objectives as appropriate. The Board is willing to consider information the City or any other interested entity may have that scientifically justifies objectives other than what is currently in the Basin Plan.

99. *Supports the issue to update the bacteria water quality objective for recreational waters. However, the Regional Water Board should rescind the fecal coliform water quality objective at the same time.*

Comment noted and appreciated. More details on the staff recommendation are contained in the proposed basin plan amendment. Staff recommendation will be to replace the general fecal coliform objective with an E. Coli objective.

100. *The Regional Water Board should clarify how beach closures relate to considerations of impairment. In addition, the Regional Water Board should clarify how specific pathogen test results would be used in determining whether a water body should be included in the Clean Water Act Section 303(d) list.*

The Regional Water Board is responsible for identifying and protecting beneficial uses of water within its jurisdiction. One of its duties is to recommend water bodies for the Clean Water Act Section 303(d) list. Beach closures and test results for specific pathogens will be considered but the Regional Water Board will use applicable water quality criteria to determine whether a water body should be listed. The State Water Board and the nine Regional Water Boards are working to clarify procedures and data requirements for 303(d) listing to increase consistency.

101. *Supports the issue of developing a policy for effluent-dominated water bodies; however, this should be a statewide issue rather than specific to the Central Valley Basin.*



See Response to Comment No. 28.

102. *Supports the issue to clarify the tributary rule language; however, this should be a statewide issue rather than specific to the Central Valley Basin.*

See Response to Comment No. 88.

103. *The Regional Water Board should place a high priority on conducting any basin planning related to completion of TMDLs.*

See Response to Comment No. 8.

104. *Supports the issue of developing water quality objectives for the rice herbicides.*

See Response to Comment No. 86.

Kati Buehler, California Rice Commission

105. *The Regional Water Board should make it a priority to address the 13 high and medium priority issues identified in the last triennial review. Issues added or dropped from the high and medium priority lists should be explained.*

See the work plan for more details on the water quality problems related to each issue. The previous high and medium priority issues maintain their ranking unless they have been completed. Issues will receive a higher priority if resources have been identified to conduct the work and they will receive a lower priority if there have been improvements in water quality.

106. *The issue of developing objectives for the rice herbicides should receive a low priority in light of the very successful Rice Pesticides Program that has reduced rice pesticide residues in surface waterways by over 99 percent.*

See Response to Comment No. 86.

Mic Stewart, Metropolitan Water District of Southern California

107. *The Regional Water Board should make it a high priority to develop a drinking water policy that includes establishing water quality objectives to protect drinking water. Of special concern is total organic carbon and cryptosporidium. Note that there have been offers of financial assistance from the California Urban Water Agencies and the California Department of Health Services.*

See Response to Comment No. 23.

108. *The Regional Water Board should make it a priority to include monitoring requirements for drinking water constituents in permits and waivers. Initial constituents of concern are total organic carbon and total dissolved solids.*

See Response to Comment No. 23.

109. *The Regional Water Board should assess the cumulative impacts of waste discharges on drinking water quality before allowing increases in permit limits in light of federal and state antidegradation requirements.*

See Response to Comment No. 23.

110. *Supports adding E. Coli as a bacteria objective for recreational waters.*

Comment noted and appreciated.

111. *The Regional Water Board should consider the federal Safe Drinking Water Act in its Basin Plan.*

The impact of the Safe Drinking Water Act will be considered in developing a Drinking Water Policy. Also, see Response to Comment No. 23.

Dale A. Pierce, USDI Fish and Wildlife Service

112. *Supports the issue of developing a policy for effluent dominated water bodies with the caveat that the focus should not be on removing beneficial uses and water quality objectives based solely on costs to comply with permits.*

Comment noted. See Response to Comment No. 28.

113. *The Regional Water Board should clarify what basin planning is required as part of developing total maximum daily load (TMDL) allocations. Reevaluation of beneficial uses and water quality objectives should be addressed separately from development of TMDLs.*

Section 303(d) of the Clean Water Act requires that the states identify and establish a priority ranking for waters that do not meet water quality standards after application of technology-based controls. Where the beneficial uses or the water quality objectives are not clearly defined, they will need to be evaluated before a TMDL can be developed.

114. *The Regional Water Board should consider raising the priority of developing a mercury TMDL for the San Joaquin River (currently, consistent with its medium priority ranking in the Clean Water Act Section 303(d) list).*

Currently, the San Joaquin River is not listed for mercury. The listing is proposed for the 2002 update of the Clean Water Act Section 303(d) list. Comments related to prioritizing the water bodies should be made at the time comments on the rankings are solicited. The Regional Water Board makes recommendations to the State Water Board on the priorities but does not set the priorities.

Regardless of whether the San Joaquin River will be listed for mercury, the loads in the San Joaquin River will be evaluated as part of the TMDL for mercury in the Delta.

115. *The Regional Water Board should consider raising the priority of developing a selenium TMDL for the San Joaquin River.*

The TMDL for selenium in the San Joaquin River was recently completed and submitted to USEPA.

116. *The Regional Water Board should designate the RARE beneficial use where it is known to exist.*

See Response to Comment No. 11.

117. *The Regional Water Board should evaluate the selenium loads from concentrated animal feeding operations in light of the fact that selenium is often added as a feed supplement.*

Comment noted. Studies are already underway to evaluate selenium loads from these operations. In addition, discharge of wastewater from confined animal facilities is prohibited.

Brandon Nakagawa, San Joaquin County Public Works (informal comments)

118. *The Regional Water Board should develop and adopt salinity objectives and an implementation program for the San Joaquin River, upstream of Vernalis.*

See Response to Comment No. 25.

Jennifer Carville, Friends of the River

119. *Current prohibitions described in the Basin Plan are too general. The Board should have specific prohibitions that detail the type of discharge prohibited and the boundaries of the prohibitions.*

The Basin Plan includes both basin-wide and area-specific prohibitions. Prohibitions are also included in waste discharge requirements. Any information supporting general and specific prohibitions should be submitted to the Regional Water Board at this time.

120. *The federal antidegradation policy (40 CFR 131.12) requires states to categorize waters into three tiers (Tier I – protect existing uses, Tier II – maintain “high quality” waters, or Tier III – protect “outstanding” waters which are labeled Outstanding National Resource Waters). California has not categorized its waters and the basin plan provides no guidance to categorizing the waters. Furthermore, it appears that the Regional Water Board is considering removal of the description of the federal policy which seems to make it possible to avoid implementing this law.*

40 CFR Part 131.12 requires certain protections for certain tiers of water bodies but the states are under no obligation to categorize their waters into these tiers. In addition, the California Water Code includes no provision for the Regional Water Boards to designate waters into these tiers.

Regardless of whether the Basin Plan includes a description of the federal policy, federal antidegradation provisions still apply. The proposed Basin Plan Amendment is to remove descriptive language that the USEPA has determined is not accurate.

121. *The dissolved oxygen objective may not be protective of all life stages of salmonids. In addition, the current objective should provide direction of what defines cold and warm zones and where zones changes occur.*

See Response to Comment No. 9.

122. *The Regional Water Board should identify the beneficial uses to specific river segments and tributaries. Canoeing/rafting should be listed as an existing beneficial use for the McCloud River, Pit River, Antelope Creek, Mill Creek, Butte Creek, and Stony Creek since these are described as whitewater runs in many California rafting guidebooks.*

In order to add beneficial uses to water bodies in the Basin Plan, supporting documentation must be submitted. Staff needs to develop a template for submitting information to meet the conditions for amending the basin plan and to promote ease of review for timely staff response. See Issue No. 15 for more details on the status of this problem.

123. *The Regional Water Board should divide the recreational beneficial use to provide a separate subcategory for angling or fishing.*

The Basin Plan already includes a definition for Commercial and Sport Fishing (COMM), which would cover angling and fishing. This beneficial use has been applied as Board staff documents the existence of the use. Regardless, waters that would have been assigned COMM are probably already assigned municipal supply, recreation, and aquatic life uses. The water quality objectives for these

other uses should be sufficient to protect COMM. See Issue No. 15 for more details on the status of this problem.

124. *The Regional Water Board should designate the RARE beneficial use where it is known to exist.*

See Response to Comment No. 11.

125. *The Regional Water Board should consider adding these beneficial use categories since these uses apply to many of the rivers in the Sacramento and San Joaquin River Basins:*

1. *“Flood Peak Attenuation/Flood Water Storage” – beneficial uses of riparian wetlands in flood plain areas and other wetlands that receive natural surface drainage and buffer its passage to receiving waters.*
2. *“Inland Saline Water Habitat” – beneficial uses of water that support inland saline water ecosystems including, but not limited to, preservation and enhancement of aquatic saline habitats, vegetation, fish, and wildlife, including invertebrates.*
3. *“Water Quality Enhancement” – beneficial uses of waters that support natural enhancement or improvement of water quality in or downstream of a water body including, but not limited to, erosion control, filtration and purification of naturally occurring water pollutants, streambank stabilization, maintenance of channel integrity, and siltation control.*
4. *“Natural Flow Regime” – beneficial uses of waters that help create and maintain riparian and aquatic habitat for all life stages of riverine plants and organisms.*

Staff has not established that any of these are beneficial uses that apply within the Sacramento River and San Joaquin River Basins. In addition, staff is not aware of water quality objectives specific to any of these uses. This comment will be forwarded to the State Water Board for statewide consideration.

126. *The Basin Plan should include a schedule of when the Board intends to complete the TMDLs for the water bodies listed on the Clean Water Act Section 303(d) list.*

The schedules are included as part of the Clean Water Act Section 303(d) list and are not part of the basin planning process.

127. *The Regional Water Board should use a more rigorous bacteria standard for determining when the public should be warned of high bacteria counts.*

The Regional Water Board’s jurisdiction does not include beach closures or warnings to the public. The purpose of the water quality objectives is to be the foundation of effluent and receiving water limits in waste discharge requirements to protect beneficial uses and to determine if beneficial uses are being impaired

and, if so, to support adding the affected water body to the Clean Water Act Section 303(d) list. The Regional Water Board will be considering updating the bacteria objective for recreational waters. More details on the staff recommendation are contained in the proposed basin plan amendment.

128. *Suction dredging and gravel mining negatively impact the beneficial uses in the Yuba River and should be restricted.*

These discharges are subject to regulation through Water Quality Certification, waste discharge requirements and/or NPDES permits. This is a permitting issue and is best handled through the permitting process.

129. *Water quality issues in the Yuba River include high levels of arsenic and low levels of DO beneath Spaulding Reservoir. In addition there is a severe temperature problem on the Yuba River down to Marysville in late spring and early summer.*

Water quality impairment information should be provided to the Regional Water Board as part of the solicitation for data supporting listing or delisting water bodies on the Clean Water Act Section 303(d) list. The last solicitation was during the first half of 2001. If this information was not submitted then, it should be submitted during the next solicitation period. Friends of the River will be added to that mailing list.

130. *The Basin Plan does not address the water quality issue of high mercury levels in Cache Creek. Nor does it address toxics from abandoned mines near Highway 20 leaching into Cache Creek. Public notices should be posted on the whitewater boating stretches of Cache Creek to inform the public of the contaminants in the creek.*

See Response to Comment No. 129. A TMDL is under development for mercury in Cache Creek. See Issue No. 4 for more details on the status of this TMDL. The Regional Water Board does not have jurisdiction to close beaches.

131. *The Basin Plan needs to address OP pesticides in the Sacramento River, and heavy metals leaching out of the old Iron Canyon Mine. Temperature and turbidity levels in the Sacramento River exceed the water quality objectives and should be addressed in the Basin Plan.*

See Response to Comment No. 129. OP pesticides in the Sacramento River are subjects of a current TMDL effort. See Issue No. 3 for more details on the status of this problem.

132. *The Regional Water Board should recognize the role of flood control in solving water quality problems and work with the Army Corp of Engineers in their evaluation of the current flood control system.*

Regional Water Board staff work with the Army Corp of Engineers to assure protection and enhancement of beneficial uses.

133. *Hydroelectric dams impact beneficial uses of the American River. Water temperature gauges and a numerical water quality standard are necessary to protect the beneficial uses of the river.*

This is a water rights issue and should be brought before the State Water Resources Control Board as part of their water rights permitting process.

134. *The Regional Water Board should reevaluate Tuolumne Utility District's discharge permit.*

This is a permitting issue and is best handled through the permitting process.

135. *Monitoring of the herbicide hexazinone in the Stanislaus River is needed to assess its impacts to water quality.*

The monitoring and surveillance programs included in the basin plan are general descriptions and do not include the level of detail to identify the individual parameters. Hexazinone will be referred to the ambient surface water monitoring staff as a potential constituent of concern to investigate if resources become available. Friends of the River will be added to the mailing list of stakeholders that are interested in monitoring in the Stanislaus River.

136. *To protect beneficial uses of the Stanislaus River, adequate bypass flows around hydroelectric projects are necessary. The Basin Plan should address this issue.*

See Response to Comment No. 133.

137. *Herbicides are a major water quality impact on the Tuolumne River. Dairy manure, salt, boron, and organophosphate chemicals contaminate the groundwater. Sedimentation from logging and grazing heavily impact the Clavey River, a tributary to the Tuolumne. The TMDLs for the Tuolumne should be strictly implemented.*

See Response to Comment No. 129. There are no completed TMDLs for the Tuolumne River.

138. *The upper section of the Tuolumne River should be designated as a Tier III river because it is one of the most outstanding rivers in the state for its ecological and recreational values.*

See Response to Comment No. 120.

Bruce West, West Yost & Associates

139. *Supports the issue to develop an effluent dominated water body policy.*

Comment noted. See Response to Comment No. 28.

140. *Supports a clarification of the tributary rule.*

Comment noted.

141. *The exemptions of State Water Board Resolution 88-63 should be allowed without a basin plan amendment.*

The State Water Board has stated in their “Continuous Planning Process” report to USEPA that “to remove an inappropriate designation from surface water, the board must clearly demonstrate that the water body meets one of the exception criteria, and that one of the six factors listed [in 40 CFR 131.10] applies. These demonstrations must be supported by substantial evidence in the record.” The process for making these demonstrations is through a basin plan amendment. Any changes to this policy will require State Water Board and USEPA approval.

Nicole E. Granquist, Downey, Brand, Seymour & Rohwer LLP

142. *The Regional Water Board should include the issue to develop a policy for agricultural dominated water bodies in the issue to develop a policy for effluent dominated water bodies and the combined issue should receive a high priority.*

See Response to Comment Nos. 28 and 89.

143. *Supports clarifying the tributary rule to state that its original intent was not to designate beneficial uses for the tributaries. The Basin Plan should provide guidance that the tributaries do not necessarily have the same beneficial uses as the downstream water bodies and that effluent limits will be derived to ensure that discharges to the tributaries will not adversely impact beneficial uses of the downstream water body.*

See Response to Comment No. 27.

Mr. Warren Tellefson, Central Valley Wastewater Manager’s Association

144. *Economic considerations must be included in determining water quality objectives and waste discharge standards.*

See Response to Comment No. 58.

145. *Supports development of a policy for effluent dominated water bodies.*



See Response to Comment No. 28.

146. *The Basin Plan should recognize that the Sources of Drinking Water Policy did not designate all waters as MUN; therefore, water bodies that meet the exception criteria should not need to be de-designated and no use attainability analysis is needed.*

All changes to the listed or implied beneficial uses must be done in a basin planning process. For surface waters, this process includes conducting a use attainability analysis, as appropriate.

147. *The Regional Water Board should adopt appropriate disinfection objectives. The Regional Water Board should recognize that probable uses are different than potential uses and the Board should consider seasonal disinfection requirements.*

See Response to Comment No. 98. Water Code section 13241 requires the Regional Water Board to consider, among other factors, “probable future beneficial uses” in establishing water quality objectives. Water Code section 13263 also requires the Regional Water Board to consider the factors in Water Code section 13241 where it imposes requirements not based on existing water quality objectives, including “probable future beneficial uses”. The Regional Water Board may allow seasonal disinfection requirements where appropriate and will consider the factors in Water Code section 13241 where required.

148. *The Regional Water Board should properly designate water bodies as WARM and/or COLD rather than using the tributary rule.*

Designation of beneficial uses is done after supporting studies and a basin plan amendment process have been completed. The Regional Water Board is willing to designate beneficial uses for all water bodies with adequate supporting information and provision of staff resources. See Issue No. 14 for more details on the status of this.

149. *The dissolved oxygen objectives should be revised to be consistent with the USEPA guidance.*

See Response to Comment No. 9.

150. *The Regional Water Board should develop an antidegradation policy, consistent with State Water Board Resolution No. 68-16, for groundwater that recognizes that some changes to water quality will result from discharges and /or ponding of treated wastewater. The Regional Water Board should also consider that reuse of water is a benefit to the people of the State but will cause some degradation of groundwater.*

See Response to Comment No. 36. Both the State and Regional Water Board encourage the reclamation and reuse of water [State Water Board Resolution No. 77-1 and the “Control Action Considerations of the Central Valley Regional Board” in Chapter IV of the Basin Plan]. However, the policies specify that the State and Regional Water Boards must still protect the beneficial uses and maintain the highest water quality consistent with Resolution 68-16. The State Water Board has issued many Orders providing guidance to the Regional Water Boards in implementing Resolution 68-16.

151. *The Regional Water Board should delete the delta temperature requirement or clarify that it is applicable only to peak increases in the summer months.*

This is being partially addressed in the Effluent Dominated Water bodies issue. See Issue No. 1 for more details on the status of this problem. Any larger scale changes will have to be justified with adequate studies and resources will need to be identified for staff to administer the amendments.

152. *The Regional Water Board should delete the delta pH requirement in the Basin Plan.*

This is being addressed as part of the Effluent Dominated Water bodies issue. See Issue No. 1 for more details on the status of this problem.

153. *The Regional Water Board should revise the turbidity objective to allow an increase of 10 NTU in waters designated COLD, 20 NTU in waters designated WARM or it should be deleted altogether. For background turbidities above 10 NTU, the increase should be limited to 10 percent.*

Any proposed revisions to the turbidity objective must be scientifically justified and adequate resources will need to be identified for staff to administer the amendments.

154. *The Basin Plan should include clarifying language that water quality-based mass limits must take into consideration both increased flow and dilution where it occurs and not use dry weather flows to derive wet weather limits.*

See Response to Comment No. 40.

155. *The Regional Water Board should recognize that copper is not toxic in municipal effluents.*

Staff is not aware of any studies that show that copper from municipal effluents is any different than copper from any other sources. Copper is widely recognized as being toxic above certain threshold amounts, especially to aquatic organisms. These thresholds can, and often are exceeded in municipal wastewater effluent.

156. *The Basin Plan should include a standardized table of monitoring requirements for all parameters.*

Monitoring requirements are developed on a case-by-case basis. They include consideration of the discharge volume and characteristics, and receiving water characteristics. This is a permitting issue and not appropriate for inclusion in the Basin Plan.

Tess Dunham, California Farm Bureau Federation

157. *Supports development of waiver policies and TMDL development.*

Comment noted.

158. *Requests the Board consolidate implementation required through the waiver program with the implementation required as a result of TMDLs as it relates to agriculture so that farmers are not subject to multiple and conflicting requirements.*

TMDL development is a public process and the opportunity will be given for stakeholders to provide input into TMDL development and implementation. Regional Water Board staff is working with stakeholders on developing information that can be used to develop waiver policies and other options to deal with the sunset of existing waivers caused by SB390. During both these processes, farmers have the opportunity to provide comment to ensure that the implementation requirements are manageable, protective of beneficial uses, and consistent. Staff will try to implement control programs in a manner that is consistent with the TMDL program provisions and the waiver policy. Staff will coordinate implementation programs, identify conflicting situations and address these when adopting basin plan amendments.

159. *Concerned over the tributary rule and its applicability to Effluent Dominated Water bodies and Agricultural Dominated Water bodies.*

See Response to Comment No. 27. Also, see proposed basin plan amendment.

Jane Vorpagel, Department of Fish and Game

160. *Supports the issue to develop temperature objectives to protect spring run salmon and steelhead in the upper portion of the Upper Sacramento River.*

See Response to Comment No. 18.

161. *Supports development of ammonia and chlorine objectives and offers assistance from DFG staff.*

See Response to Comment No. 5.

Mike Zanolli, Department of Water Resources: Reiterated Comment No. 93.

John Coburn, State Water Contractors: Reiterated Comment Nos. 50 and 52.

Cindy Paulson, Brown and Caldwell/Turlock Irrigation District

162. *Supports development of TMDLs with request for adaptive management. Requests that TMDL development begin with a review of beneficial uses and water quality objectives for appropriateness.*

Comment noted.

163. *Supports re-evaluating the tributary rule. Upstream beneficial uses should be designated with site-specific data rather than automatically assigning the downstream uses.*

Comment noted. See Response to Comment Nos. 27 and 148.

164. *Supports development of a waiver policy for agriculture. Staff should take the time to develop a good program and coordinate with the on-going agricultural monitoring program.*

Comment noted. See Issue No. 6 for more details on the status of this problem.

Ken Stewart, Contra Costa County: Reiterated Comment Nos. 44 and 46.

Parry Klassen, CURES-Coalition for Urban/Rural Environmental Stewardship

165. *Would like to update the Regional Water Board on programs described in the agricultural waiver workshop held last year. CURES recently mailed out a packet called the "Water Stewardship Program" to education 1500 orchard growers in the Sacramento River watershed area. The packet contained a menu of options that growers can use to protect surface water quality. CURES will be starting a pesticide stewardship program targeting rice growers. The goal is to address the issue of pesticides in surface waters by keeping the issue in front of growers.*

Update noted and appreciated.

Dan Hinrichs, DJH Engineering/Central Valley Wastewater Manager's Association:  
Reiterated Comment No. 150

Bill Jennings, Deltakeeper

166. *Antidegradation provisions need to be updated given USEPA's disapproval.*

See Response to Comment No. 2. Also see proposed basin plan amendment for more details.

167. *Supports updating the bacteria objective.*

Comment noted.

168. *Scheduling of TMDLs need to be revised. Under the current schedule, the current list will not be completed until 2040 assuming no new listing occur between now and then. This pace is unacceptable. Resources have been squandered on the stakeholder process. The Regional Water Board needs to re-focus on completing technical TMDLs and address this backlog of listed water bodies.*

See Response to Comment No. 126.

169. *Monitoring programs in permits should be adequate to establish mass loading and assimilative capacity so that staff can use this data to focus on development of TMDLs.*

The purpose of monitoring programs in permits is to ensure compliance with waste discharge requirements. The list of constituents in a monitoring program consists of the pollutants in the discharge with receiving water or effluent limits. Also, see Response to Comment No. 156. Monitoring requirements for discharges to water bodies that are included in the Clean Water Act Section 303(d) list include the listed constituents. As TMDLs are developed, permits will be revised to incorporate appropriate load and/or concentration limits.

170. *The temperature objective is not protective of aquatic life and should be re-evaluated.*

See Response to Comment No. 18.

Nicole E. Granquist, City of Turlock: Reiterated Comment No. 142.

171. *Supports the Effluent Dominated Water bodies issue and requests that the Regional Water Board work with the regulated community to come up with a sound policy. Note that the biggest issue with effluent dominated water bodies is the municipal and domestic beneficial use (MUN). In the State Water Board hearings regarding the appeal of the NPDES permit for the City of Vacaville Wastewater Treatment Facility, the Department of Health Services testified that effluent dominated water bodies cannot and should not be used for a municipal drinking water supply. Therefore, wastewater treatment facilities should not be required to clean up their discharges to drinking water quality when the receiving water cannot be used for MUN.*

See Response to Comment No. 28. The Department of Health Service testimony can be interpreted in different ways. For example, one can also take their statements to mean that waste discharges should not be allowed in intermittent or low-flowing streams, thus, preventing the formation of effluent dominated water bodies. This would be a reasonable interpretation, consistent with the Water Code, since discharges to surface waters are a privilege and not a right and are not allowed to impair beneficial uses.

Jennifer Carville, Friends of the River: Reiterated Comment Nos. 119, 120, 121, 122, 123, 124, 125, and 126

Terry Schmidtbauer, Environmental Health Department of Solano County: Reiterated Comment No. 15

Patrick Koepele, Tuolumne River Preservation Trust

172. *Supports updating water quality objective for temperature due to its effect on salmonids (Chinook salmon and steelhead) in the San Joaquin River and its tributaries including the Stanislaus, Tuolumne and Merced rivers. Please note that the National Marine Fisheries Service has listed steelhead as a threatened species and designated the San Joaquin River and its three major tributaries as its critical habitat.*

See Response to Comment No. 18.

Lynell Garfield, South Yuba River Citizen's League

173. *The Yuba River, from the sources to Englebright Reservoir, should have migration listed as a potential beneficial use as supported by current Calfed studies.*

Staff is unaware of any special water quality objectives needed for migration beyond the objectives needed to protect COLD, which is one of the beneficial uses assigned to Englebright Reservoir. In order to add beneficial uses for water bodies in the Basin Plan, supporting documentation must be submitted. Staff needs to develop a template for submitting information to meet the conditions for amending the basin plan and to promote ease of review for timely staff response. See Issue No. 15 for more details on the status of this problem.

174. *The water quality objectives for bacteria should be revised to include E. Coli and enterococcus standards, consistent with USEPA and Department of Health Service criteria.*

See Response to Comment No. 46.

175. *The Board should adopt water quality objectives for phosphate. SYRCL recommends an objective of no higher than 1 ppm for the Yuba River to prevent excessive algae growth. Note: algal decay causes dissolved oxygen levels in reservoirs to drop and mercury methylation rates to increase which may result in potent developmental toxic levels of methylmercury in predatory fish.*

See Response to Comment No. 62.

176. *The Regional Water Board should recognize that urbanization and rural sprawl is a serious water quality problem discharging sediment into surface waters.*

Urban development is a land use issue that is outside the jurisdiction of the Regional Water Board. However, the Regional Water Board agrees that sedimentation from urban development is an issue. See Issue No. 13 for more details on the status of this problem. Currently, construction that disturbs five acres or more of land is required to file a Notice of Intent to Comply with the NPDES Stormwater Construction permit. Requirements in this permit are designed to prevent beneficial use impairment due to sediment releases from construction activities. The Regional Water Board has recently increased enforcement in this area. Beginning in March of 2003, projects that disturb more than one but less than 5 acres of land will be required to comply with the Phase II NPDES Stormwater Construction general permit.

Bill Thomas, Grape & Tree Fruit/California Cattlemen's Association

177. *The Basin Plan should clearly allow Regional Water Board staff reasonable flexibility in applying standards.*

The purpose of the Basin Plan is to present the identified beneficial uses, water quality objectives to protect beneficial uses, and implementation programs to ensure the objectives are being met. The Basin Plan specifies what type of flexibility the Regional Water Board can exercise in applying standards. For example, averaging periods can be used for turbidity, pH and temperature. Also, mixing zones may be allowed for NPDES and stormwater discharges to surface waters, as long as beneficial uses are protected.

178. *Application of narrative and numeric standards need to be clarified.*

See Response to Comment No. 29.

179. *The water quality objective for pesticides is different than the water quality objectives for chemical constituents and toxicity. The applicability of these objectives is not clear.*

See the Regional Water Board Policy for Application of Water Quality Objectives in Chapter IV of the Basin Plan. Pesticides are expected to be toxic at their

application concentrations. However, it is not unreasonable to expect that, outside their immediate area of application, all pesticide concentrations should be sufficiently diluted or decomposed into nontoxic components such that they cause no adverse impacts in the adjacent and nearby waters of the State. A special permit is available for in-stream pesticide uses but toxicity is not to occur outside the boundaries of the application area. None of the objectives are meant to override any of the others. In fact, elsewhere in the Basin Plan, it states that to the effect that objectives conflict the most stringent applies.

180. *The application of the toxicity objective should be clarified to clearly state what it is and how it is determined.*

See Response to Comment No. 29.

181. *The tributary rule and application of the antidegradation policies needs to be clarified.*

See Response to Comment Nos. 27, 36 and 67.

Jacqueline McCall, City of Vacaville: Reiterated Comment Nos. 27 to 30.

Elaine Archibald, California Urban Water Agencies: Reiterated Comment No. 23.

John T. Headlee (Written Comments)

182. *Imposition of CTR standards on groundwater in the context of dredging constitutes new groundwater objectives and an economic analysis of this policy must be done.*

The only time that CTR standards are used in a groundwater context is when the groundwater has hydraulic continuity with surface water. Therefore, it is appropriate to protect the surface water with surface water standards. This does not constitute new water quality objectives and no economic analysis is required.

Andy Eimanis, Makhteshim-Agar of North America, Inc.

183. *The Regional Water Board should clarify interpretation of the toxicity objective in view of the pesticide objective since, by definition, all pesticides are toxic to some organisms at some concentration.*

See Response to Comment No. 179.

184. *The Regional Water Board should re-evaluate its criteria for including water bodies on the Clean Water Act Section 303(d) list when the criteria is not based on established water quality standards.*



Criteria for listing water bodies is best addressed through the biennial evaluation of water bodies for inclusion in the Clean Water Act Section 303(d) list.

The State Water Board is developing a listing policy to be used for future listings with assistance from the Public Advisory Group established in AB982. This policy should increase the consistency in how Regional Water Boards select water body and pollutant pairs for 303(d) listing.

Alice Howard, Maidu Group of the Mother Lode Chapter

185. *Supports updating of the guidelines for on-site disposal systems.*

See Response to Comment No. 15.